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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,253	10/16/2003	Oleg Mosesov	021628-000700US	4570
20350	7590	03/21/2006	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			LEE, YUN HAENG NMN	
			ART UNIT	PAPER NUMBER
			3766	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/688,253	Applicant(s) MOSESOV ET AL.	
	Examiner Yun H. Lee	Art Unit 3766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22,25-29 and 32-38 is/are rejected.
- 7) ☒ Claim(s) 23,24,30 and 31 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 10, 11, 19-22, 28, 29 and 35-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Abrahamson (US Pat. Appl. Pub. No. 20020103514).

Regarding claim 1, Abrahamson discloses an implantable medical device comprising:

a wireless receiver (16) configured to communicate wirelessly with an external transmitter (8) of an external device via a plurality of communication channels (paragraph 16 line 6) each having a different frequency within a frequency band, the wireless receiver comprising a wideband receiver circuit configured to detect a signal from any of the plurality of communication channels at the different frequencies within the frequency band simultaneously (paragraphs 36 and 37).

Regarding claim 2, Abrahamson discloses the device of claim 1 wherein the frequency band is between 402 and 405 MHz, and wherein the plurality of communication channels comprise 10 contiguous channels of 300 KHz each in the frequency band (paragraph 13).

Regarding claim 10, Abrahamson discloses an implantable medical device comprising:

a wireless receiver (16) configured to communicate wirelessly with an external transmitter (8) of an external device via a plurality of communication channels (paragraph 16 line 6) each having a different frequency within a frequency band, the wireless receiver comprising a receiver circuit configured to detect a signal from any of the plurality of communication channels at the different frequencies within the frequency band (paragraphs 36 and 37); and

a wireless transmitter (16) configured to communicate wirelessly with an external receiver (8) of the external device via the plurality of communication channels, wherein the wireless transmitter is configured to transmit a signal to the external receiver via a communication channel which is used by the external transmitter to communicate with the wireless receiver of the implantable medical device as detected by the receiver circuit.

Regarding claim 11, the limitations are met by the above discussion of claim 1.

Regarding claim 19, the limitations are met by the above discussion of claim 10.

Regarding claim 20, Abrahamson discloses a medical communication system comprising:

an implantable medical device including a wireless receiver and a wireless transmitter (16); and

an external device including an external transmitter and an external receiver (8) configured to communicate wirelessly with the implantable medical device via a plurality

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of communication channels (paragraph 16 line 6) each having a different frequency within a frequency band;

wherein the external device is configured to communicate wirelessly with the implantable medical device via a preset communication channel (paragraph 25), and wherein the external device is configured to communicate wirelessly with the implantable medical device via an alternate communication channel selected according to an order of priority (paragraph 30 lines 5-7) if the wireless receiver does not detect a suitable signal from the external transmitter using the preset communication channel.

Regarding claim 21, Abrahamson further discloses the medical communication system of claim 20 wherein the external device is configured to communicate wirelessly with the implantable medical device in a present communication session on a last communication channel used in a last communication session immediately preceding the present communication session. The device of Abrahamson uses a single channel (active channel) to establish a communication link (paragraph 16 lines 5-9) until switching channels becomes necessary (paragraph 16 lines 16-19). Thus, when the present communication session is initiated, it will inherently be on the last communication channel (active channel) used in a last communication session immediately preceding the present communication session.

Regarding claim 22, the limitations are met by the above discussion of claim 21.

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Regarding claims 28 and 29, the limitations are met by the above corresponding discussions of claims 20 and 21, respectively.

Regarding claim 35, Abrahamson discloses the method of claim 28 wherein switching to the alternate communication channel comprises selecting a communication channel having a lowest channel interference as the alternate communication channel based on measurement of channel interference conducted prior to attempting initiation of the present communication session (paragraph 30 lines 5-7).

Regarding claim 36, Abrahamson discloses the method of claim 35 wherein the alternate communication is selected based on measurement of channel interference immediately prior to the present communication session. The device of Abrahamson continuously measures channel interference (paragraph 44) and thus, when the alternate communication is selected, it will inherently be based on measurement of channel interference immediately prior to the present communication session.

Regarding claim 37, Abrahamson discloses the method of claim 35 wherein the alternate communication is selected based on a statistical combination of multiple measurements of channel interference over time prior to the present communication session (paragraph 29 lines 4-5).

Regarding claim 38, the limitations are met by the above discussion of claim 21.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-6, 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrahamson (US Pat. Appl. Pub. No. 20020103514).

Regarding claims 3-6, the examiner takes Official Notice of the fact that it is well known in the art to use the various listed components in a wideband receiver circuit. Since Abrahamson discloses that the wireless receiver is provided with all necessary circuitry (paragraph 22 lines 3-6), it would have been obvious to one of ordinary skill in the art at the time of invention to have included the various components listed in claims 3-6 in the device of Abrahamson.

Regarding claims 12-15, the limitations are met by the above discussion of claims 3-6.

5. Claims 7-9, 16-18, 25-27 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrahamson (US Pat. Appl. Pub. No. 20020103514) in view of Von Arx et al. (US Pat. Appl. Pub. No. 20030114897).

Regarding claims 7-9, Abrahamson does not disclose that the wireless receiver is configured to:

detect wirelessly a signal from the external transmitter at a primary predetermined time arranged in a previous communication with the external transmitter;

detect wirelessly a signal from the external transmitter at a secondary predetermined time arranged in the previous communication with the external device if the wireless receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time; and

scan for signals from the external transmitter at preset time periods if the receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time.

Von Arx et al. clearly teaches of these through duty cycling. Von Arx et al. further teaches that duty cycling may advantageously avoid the inconvenience of premature battery depletion (paragraph 29 lines 14-16). Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to configure the device of Abrahamson so that it would function as specified in claims 7-9 such that it may advantageously avoid the inconvenience of premature battery depletion.

Regarding claims 16-18, the limitations are met by the above discussion of claims 7-9.

Regarding claims 25-27, the limitations are met by the above discussion of claims 7-9.

Regarding claims 32-34, the limitations are met by the above discussion of claims 7-9.

Allowable Subject Matter


6. Claims 23, 24, 30 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yun H. Lee whose telephone number is (571) 272-2847. The examiner can normally be reached on M-Th 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Robert Pezzuto
Supervisory Patent Examiner
Art Unit 3766